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Jiang

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(54) **TIN-IODATE RECHARGEABLE BATTERY**

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CPC **H01M 8/188** (2013.01); **H01M 4/368** (2013.01); **H01M 4/387** (2013.01); **H01M 4/583** (2013.01); **H01M 8/08** (2013.01); **H01M 2300/0005** (2013.01)

(58) **Field of Classification Search**

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See application file for complete search history.

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(57) **ABSTRACT**

The present invention discloses a rechargeable tin-iodate battery, including static battery and redox flow battery, in which anodic tin will be dissolved as Sn^{2+} and Sn^{4+} ions while iodate will be reduced to iodine and iodide at carbon cathode during discharging. The process will be reversed in charging. The tin-iodate battery comprises a tin anode (1), a carbon cathode (2), a selective permeable separator (3), and aqueous acidic electrolytes, whereby electricity energy can stored with high energy density and high power density, and large-scale energy storage and electrified vehicle can be achieved.

10 Claims, 2 Drawing Sheets

